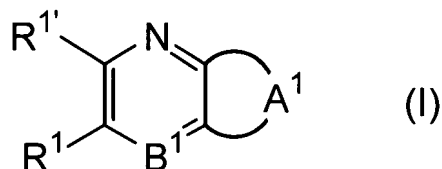


AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A compound of the general formula (I):



~~a prodrug, or~~ a pharmaceutically acceptable salt ~~or a solvate~~ thereof; wherein:

B¹ is -C(R²)= ~~or~~ -N=;

one of R¹ and R² is a group of the formula: -Z¹-Z²-Z³-R⁵ wherein

Z¹ and Z³ each are independently a single bond, optionally substituted alkylene or optionally substituted alkenylene;

Z² is a single bond, optionally substituted alkylene, optionally substituted alkenylene,

-CH(OH)-, -S-, -SO-, -SO₂-, -SO₂N(R⁶)-, -N(R⁶)SO₂-, -O-, -N(R⁶)-, -N(R⁶)CO-, -CON(R⁶)-, -C(=O)-O-, -O-C(=O)- or -CO-;

R⁶ is hydrogen, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted aryl or optionally substituted heteroaryl; and

R⁵ is optionally substituted aryl, optionally substituted heteroaryl, optionally substituted cycloalkyl, optionally substituted cycloalkenyl or optionally substituted heterocycle, and the other of R¹ and R² is hydrogen or a substituent selected from Substituent Group A;

R^{1'} is hydrogen or a substituent selected from Substituent Group A;

A¹ is ~~-C(-Y)=C(-R^A)-C(-R³)-C(-R⁴)-, -C(-Y)=C(-R^A)-C(-R³)-N-,~~

~~-C(-Y)=C(-R^A)-C(=X)-N(-R⁴)[[,] or -C(-Y)=C(-R^A)-N=C(-R⁴)-, -C(-Y)=C(-R^A)-C(-R³)-C(-R⁴)-~~

~~, -C(-Y)=C(-R^A)-O-C(-R⁴)-, -C(-Y)=C(-R^A)-C(-R³)-O-, -C(-Y)=C(-R^A)-O- or~~

~~-C(-Y)=C(-R^A)-C(-X)-O-~~ wherein

X is oxygen or sulfur;

Y is -OH, -SH or -NH₂;

R^A is $-C(=Z)R^7$ wherein Z is oxygen or sulfur; and R^7 is a substituent selected from Substituent Group A,

-NHOH,

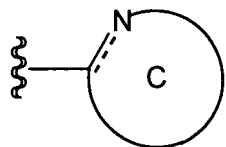
-N=NR¹⁰ wherein R¹⁰ is hydrogen, alkyl, acyl, aralkyl, aryl or heteroaryl,

-NHSO₂R¹² wherein R¹² is alkyl, aryl, aralkyl, hydroxy or amino,

-PO(OH)₂,

-PO(OH)(R¹³) wherein R¹³ is alkyl, aryl or aralkyl, or

a group of the formula:



wherein Ring C is a nitrogen-containing heteroaromatic ring group optionally substituted by one to four of substituents selected from a group consisting of Substituent Group A and a substituent represented by the formula: $-Z^1-Z^2-Z^3-R^5$ wherein Z^1 , Z^2 , Z^3 and R^5 are as defined above;

R^3 and R^4 each is independently a substituent selected from Substituent Group A or hydrogen;

Substituent Group A is a group consisting of halogen, optionally substituted alkoxy carbonyl, carboxy, optionally substituted alkyl, optionally substituted alkoxy, alkoxyalkyl, nitro, hydroxy, hydroxyalkyl, optionally substituted alkenyl, optionally substituted alkynyl, alkylsulfonyl, alkyloxysulfonyl, optionally substituted amino, optionally substituted aminosulfonyl, alkylthio, alkylthioalkyl, haloalkyl, haloalkoxy, haloalkoxyalkyl, cycloalkyl, cycloalkenyl, oxo, thioxo, alkylenedioxy, alkylene, alkenylene, nitroso, azido, amidino, guanidine, cyano, isocyano, mercapto, optionally substituted carbamoyl, optionally substituted carbamoylalkyl, optionally substituted sulfamoyl, sulfoamino, sulfo, formyl, alkylcarbonyl, alkylcarbonyloxy, hydrazino, morpholino, phosphono, phosphinico, optionally substituted aryl, optionally substituted heteroaryl, optionally substituted heterocycle, optionally substituted aralkyl, optionally substituted heteroaralkyl, optionally substituted aryloxy, optionally substituted heteroaryloxy,

optionally substituted heterocycleoxy, optionally substituted arylthio, optionally substituted heteroarylthio, optionally substituted aralkyloxy, optionally substituted heteroaralkyloxy, optionally substituted aralkylthio, optionally substituted heteroaralkylthio, optionally substituted aryloxyalkyl, optionally substituted heteroaryloxyalkyl, optionally substituted arylthioalkyl, optionally substituted heteroarylthioalkyl, optionally substituted arylsulfonyl, optionally substituted heteroarylsulfonyl, optionally substituted aralkylsulfonyl, optionally substituted heteroaralkylsulfonyl, optionally substituted alkylcarbonyl alkyl, optionally substituted arylcarbonyl alkyl, alkylsulfonyloxy, sulfamoyloxy and optionally substituted arylcarbonyl;

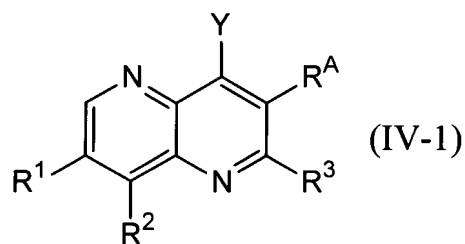
provided that (1) when A^+ is $C(-Y)=C(R^A)-C(R^3)-C(R^4)$, R^A is not the following substituted carbamoyl; (2) when A^+ is $C(-Y)=C(R^A)-C(R^3)-C(R^4)$, R^+ is hydrogen; and (3) when $-A^1-$ is $-C(-Y)=C(-R^A)-N=C(-R^4)-$, R^A is not the following substituted carbamoyl; and that, in the substituted carbamoyl of (1) and (3), its N atom is substituted with both a group of the formula: $-L-A^3$ wherein L is a single bond or alkylene, alkenylene, cycloalkylene, alkylcycloalkylene, cycloalkylalkylene or alkyl(cycloalkyl)alkylene, each optionally substituted and/or optionally interrupted by a heteroatom, or $-O(C=O)-$ or $-C(=O)O-$; A^3 is optionally substituted aryl or optionally substituted heterocycle and a group of the formula: $-R^m$ wherein R^m is a hydrogen, optionally substituted alkyl or optionally substituted phenyl at the same time, or $[[\text{"}]]-R^m[[\text{"}]]$ and $[[\text{"}]]-L-A^3[[\text{"}]]$ may be combined together with the adjacent N atom to form an optionally substituted heteroring.

2. (Canceled)

3. (Canceled)

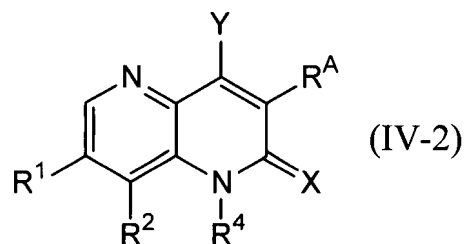
4. (Currently Amended) The compound of claim 1, represented by the general formula (IV-

1):



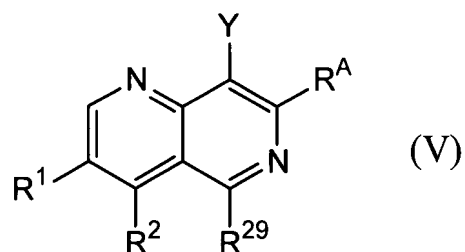
~~the prodrug, or the pharmaceutically acceptable salt or the solvate thereof;~~
wherein Y, R^A, R¹, R² and R³ are as defined in claim 1.

5. (Currently Amended) The compound of claim 1, represented by the general formula (IV-2):



~~the prodrug, or the pharmaceutically acceptable salt or the solvate thereof;~~
wherein X, Y, R^A, R¹, R² and R⁴ are as defined in claim 1.

6. (Currently Amended) The compound of claim 1, represented by the general formula (V):



~~the prodrug, or the pharmaceutically acceptable salt or the solvate thereof;~~
wherein Y, R^A, R¹ and R² are as defined in claim 1;

R²⁹ is hydrogen,

carboxy,

-N(R¹⁴)(R¹⁵) wherein R¹⁴ and R¹⁵ each is independently

hydrogen,

alkyl,

cycloalkyl,

-(CH₂)₁₋₃OR¹⁶ wherein R¹⁶ is hydrogen, alkyl, acyl or aryl,

-C(=O)R¹⁷ wherein R¹⁷ is hydrogen, hydroxy, alkoxy, alkyl, haloalkyl, alkoxy alkyl, cycloalkyl, alkoxy carbonylmethyl, optionally substituted aryl or optionally substituted heteroaryl,

-C(=S)R¹⁷ wherein R¹⁷ is as defined above,

-SO₂R²¹ wherein R²¹ is alkyl, optionally substituted aryl, optionally substituted aralkyl or optionally substituted amino,

R¹⁴ and R¹⁵ may be combined together to form an optionally substituted thioamidino group, or

R¹⁴ and R¹⁵ may be combined together with the adjacent nitrogen atom to form optionally substituted nitrogen containing heterocycle optionally possessing nitrogen, sulfur and/or oxygen in its ring,

-(CH₂)₀₋₃OR¹⁸ wherein R¹⁸ is hydrogen, alkyl, acyl or aryl,

-(CH₂)₁₋₃CONHR¹⁹ wherein R¹⁹ is hydrogen, alkyl, acyl or aryl,

-SO₃R²⁰ where R²⁰ is alkyl or hydroxy,

-SO₂R²¹ wherein R²¹ is alkyl or optionally substituted amino,

-PO(OH)₂,

-PO(OH)(R²²) wherein R²² is alkyl,

haloalkyl,

-(CH₂)₁₋₃COR²³ wherein R²³ is alkyl or optionally substituted aryl,

$-(\text{CH}_2)_{0-3}\text{CN}$,
 $-\text{R}^{41}-\text{COOR}^{42}$ wherein R^{41} is alkenyl and R^{42} is hydrogen or alkyl,
 $-(\text{CH}_2)_{1-3}\text{R}^{40}$ wherein R^{40} is optionally substituted aryl or optionally substituted heteroaryl,
optionally substituted aryl,
optionally substituted heteroaryl,
optionally substituted alkynyl,
optionally substituted alkylthio, or
optionally substituted alkoxy.

7-11. (Canceled)

12. (Currently Amended) The compound of claim 1, ~~the prodrug, or~~ or the pharmaceutically acceptable salt ~~or the solvate~~ thereof;

wherein R^3 or R^4 is

a carboxy or

$-\text{N}(\text{R}^{14})(\text{R}^{15})$ wherein R^{14} and R^{15} each is independently

hydrogen,

alkyl,

acyl,

$-\text{SO}_2\text{R}^{21}$ wherein R^{21} is alkyl or optionally substituted amino, or

R^{14} and R^{15} may be combined together with the adjacent nitrogen atom to form nitrogen-containing heterocycle optionally containing sulfur in its ring.

13. (Currently Amended) The compound of claim 1, ~~the prodrug, or~~ or the pharmaceutically acceptable salt ~~or the solvate~~ thereof;

wherein R^3 or R^4 is

-N(R¹⁴)(R¹⁵) wherein R¹⁴ and R¹⁵ each is independently

hydrogen,

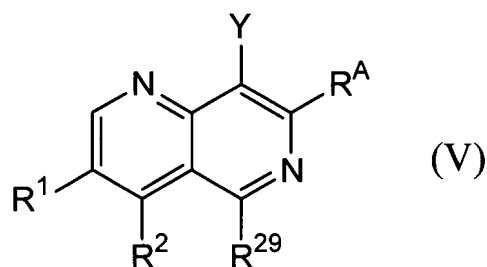
alkyl,

acyl,

-SO₂R²¹ wherein R²¹ is alkyl or optionally substituted amino, or

R¹⁴ and R¹⁵ may be combined together with the adjacent nitrogen atom to form a nitrogen-containing heterocycle optionally containing sulfur in its ring.

14. (Currently Amended) The compound of claim 1, represented by the formula:



~~the prodrug, or the pharmaceutically acceptable salt or solvate thereof;~~

wherein R¹ is a group of the formula: -Z¹-Z²-Z³-R⁵ wherein Z¹, Z², Z³ and R⁵ are as defined in claim 1;

R² is hydrogen;

R²⁹ is hydrogen, halogen, optionally substituted amino, optionally substituted alkoxy, alkylsulfonyloxy, sulfamoyloxy, alkylthio, alkylsulfonyl, optionally substituted sulfamoyl, optionally substituted alkenyl; optionally substituted alkynyl, optionally substituted aryl, carboxy, alkoxycarbonyl, optionally substituted carbamoyl, acyl or optionally substituted alkyl;

R^A is a group of the formula: -C(=O)-R⁷ wherein R⁷ is hydroxy, optionally substituted alkoxy, optionally substituted amino, optionally substituted alkyl, optionally substituted aralkyl or optionally substituted heterocycleoxy; and

Y is hydroxy.

15. (Currently Amended) The compound of claim 14, ~~the prodrug,~~ or the pharmaceutically acceptable salt ~~or the solvate~~ thereof, wherein:

R¹ is benzyl optionally substituted by halogen;

R² is hydrogen;

R²⁹ is hydrogen, halogen, optionally substituted amino, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted aryl, carboxy, alkoxycarbonyl or optionally substituted carbamoyl;

R^A is a group of the formula: -C(=O)-R⁷ wherein R⁷ is

hydroxy,

optionally substituted alkoxy,

NR⁸R⁹ wherein R⁸ and R⁹ each is independently hydrogen, optionally substituted alkyl, optionally substituted alkoxy or optionally substituted amino,

optionally substituted alkyl or

optionally substituted heterocycleoxy; and

Y is hydroxy.

16. (Currently Amended) The compound of claim 14, ~~the prodrug,~~ or the pharmaceutically acceptable salt, ~~or the solvate~~ thereof, wherein:

R¹ is benzyl optionally substituted by halogen;

R² is hydrogen;

R²⁹ is hydrogen, halogen, optionally substituted amino, optionally substituted alkenyl; optionally substituted alkynyl, carboxy, alkoxycarbonyl or optionally substituted carbamoyl;

R^A is a group of the formula: -C(=O)-R⁷ wherein R⁷ is

hydroxy,

optionally substituted alkoxy,

NR^8R^9 wherein R^8 is hydrogen and R^9 is
hydrogen,
alkyl optionally substituted by alkoxy or
amino optionally substituted alkyl, or
optionally substituted heterocycleoxy; and
Y is hydroxy.

17. (Currently Amended) The compound of claim 14, ~~the prodrug,~~ or the pharmaceutically acceptable salt ~~or the solvate~~ thereof, wherein:

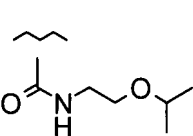
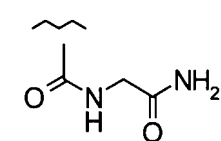
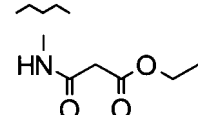
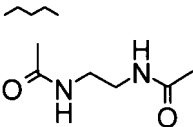
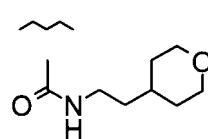
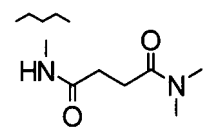
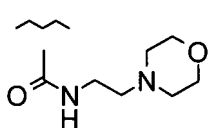
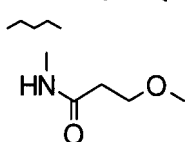
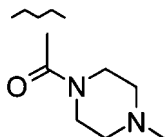
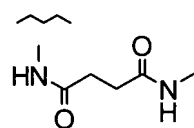
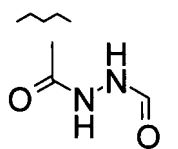
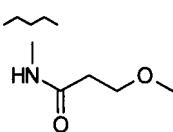
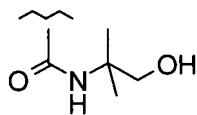
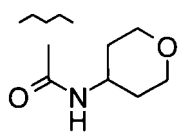
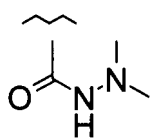
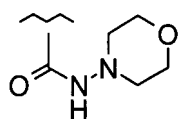
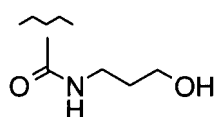
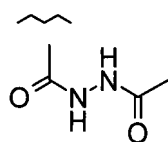
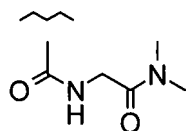
R^1 is benzyl optionally substituted by halogen;

R^2 is hydrogen;

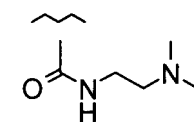
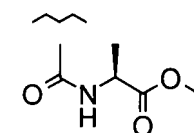
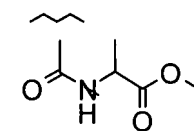
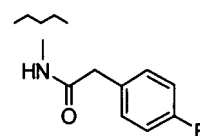
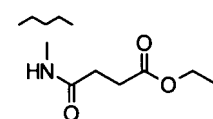
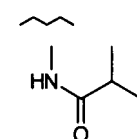
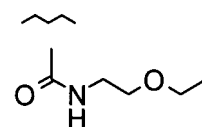
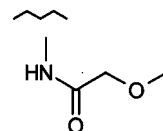
R^A is a group of the formula: $-\text{C}(=\text{O})-\text{R}^7$ wherein R^7 is hydroxy, methoxy, $-\text{NH}_2$, $-\text{NHCH}_2\text{CH}_2\text{OCH}_3$, $-\text{NHCH}_2\text{CH}_2\text{OCH}_3$, $-\text{NHCH}_2\text{CH}_2\text{OCH}_3$, $-(\text{CH}_2)_3\text{OCH}_3$, $-\text{O}(\text{CH}_2)_3\text{OCH}_3$, $-\text{OCH}(\text{CH}_3)\text{CH}_2\text{OCH}_3$, optionally substituted piperidyloxy or optionally substituted tetrahydropyranyloxy;

Y is hydroxy; and

R^{29} is any one of the following groups:



-COOH



an optionally substituted amino selected from the group consisting of -NHSO₂Me, -NHCOMe, -NHSO₂NMe₂, -NHSO₂iPr, -NHSO₂-Ph-4-F, -NHSO₂Et, -NHSO₂Bn, -NHSO₂CH₂CF₃, -NHSO₂CH₂CO₂Me, -NHSO₂CHCH₂iPr, -NHSO₂CHCH₂Ph, -NHCOCH₂CH₂OMe, -NHCOPh, -NHCOEt, -NHCO-c-Pr, -NHCO-c-hex, -NHCOCH₂CO₂Et, -NHCO-2-thienyl, -NHCO-5-isoxazolyl, -NHCONMe₂, -NHCO₂Et, -NHCOCO₂Et, -NHCOCH₂CH₂CO₂Me, N-succinimide, -NHCOCOCONMe₂, -NHCOCH₂CONMe₂, NHCOCOCONH₂, -NHCO₂Me, -NHCO-2-pyrimidine, -NHCO-2-furan, -NHCO-3-triazol-1-Me, -NHCO₂iPr, -NHCO₂CH₂CH₂OMe, p-toluenesulfonylamino, (2-thiazole-4-yl)acetylamino, 2-(dimethylcarbamoyl)acetylamino, thiazole-4-carbonylamino, methylaminooxazalylamino and (thiazole-5-carbonyl)amino, an optionally substituted alkynyl selected from the group consisting of -C≡CCH₂OMe, -C≡CPh, -C≡C-N-Pr, -C≡CCO₂Me, -C≡CCH₂NHAc, -C≡CCH₂NHSO₂Me, -C≡C-c-pentyl(1-OH) and -C≡CCH₂OH, an optionally substituted carbamoyl selected from the group consisting of -CONH-iPr, -CONHCH₂CH₂OMe, -CONH-N-morpholyl, -CONHNHAc, -CO-(4-Me-piperazine), -CONH-(2-thiazol), -CONHCH₂CONMe₂, -CONH(CH₂)₃OCOCF₃, -CONEt₂, -CO-morpholyl, -CONHSO₂Me, -CONMeSO₂Me and -CONHSO₂Ph, -CF₃, -COMe, -SMe, -SO₂Me, -OMe, -OCH₂CO₂Me, -OCH₂CH₂OMe, -CH₂CH=CH₂, -CN, 4-piperidinyl, -NH₂, hydrogen, Cl, Br, COOMe, 2-oxo-pyrrolidinyl, 2-oxopiperidyl or 4-(hydroxymethyl)phenyl.

18. (Currently Amended) The compound of claim 14 ~~the prodrug~~, or the pharmaceutically acceptable salt ~~or the solvate~~ thereof, wherein:

R¹ is a benzyl optionally substituted by halogen;

R² is hydrogen;

R^A is a group of the formula: -C(=O)-R⁷ wherein R⁷ is methoxy, -NHCH₂CH₂OCH₃, -NH₂, -NHN(CH₃)₂, -O(CH₂)₃OCH₃, -OCH(CH₃)CH₂OCH₃, optionally substituted piperidyloxy

(substituent: acetyl or methanesulfonyloxy) or optionally substituted tetrahydropyranyloxy;

Y is hydroxy; and

R²⁹ is

an optionally substituted amino selected from the group consisting of -NHCOMe, -NHSO₂NMe₂, -NHCOCH₂CH₂OMe, -NHCOPh, -NHCOCH₂CO₂Et, -NHCO-2-thienyl, -NHCO₂Et, -NHCOCH₂CH₂CO₂Me, -NHCOCONMe₂ and -NHCOCONH₂),

an optionally substituted alkynyl selected from the group consisting of -C≡CCH₂OMe, -C≡CCH₂NHAc, -C≡CCH₂NHSO₂Me, -C≡C-c-pen-(1-OH) and -C≡CCH₂OH, -CH₂CH=CH₂, 4-piperidyl or hydrogen.

19-27. (Canceled)

28. (Currently Amended) A pharmaceutical composition comprising the compound of claim 1, ~~a prodrug~~, or a pharmaceutically acceptable salt ~~or a solvate~~ thereof together with a pharmaceutically acceptable carrier or diluent.

29-33. (Canceled)

34. (Withdrawn) A mixed composition for anti-HIV comprising the pharmaceutical composition of claim 28 together with a reverse transcriptase inhibitor and/or a protease inhibitor.

35. (Canceled)

36. (Withdrawn) A method for preventing or treating AIDS or AIDS related complications,

which comprises administering an effective amount of the pharmaceutical composition of claim 28 to a patient in need thereof.

37. (Withdrawn) A method for preparing a pharmaceutical composition for preventing or treating AIDS or AIDS-related complications, which comprises mixing the compound of claim 1 with a pharmaceutically acceptable carrier or diluent.

38-42. (Canceled)